



Freeform Search

| | |
|------------------|---|
| Database: | US Pre-Grant Publication Full-Text Database |
| | US Patents Full-Text Database |
| | US OCR Full-Text Database |
| | EPO Abstracts Database |
| | JPO Abstracts Database |
| | Derwent World Patents Index |
| | IBM Technical Disclosure Bulletins |

| | | | |
|--------------|-----------------------|---|---|
| Term: | L24 and covalent bond |  |  |
|--------------|-----------------------|---|---|

| | | | | | |
|-----------------|---------------------------------|-------------------------------------|----------------------------------|-----------------------------|--------------------------------|
| Display: | <input type="text" value="10"/> | Documents in Display Format: | <input type="text" value="CIT"/> | Starting with Number | <input type="text" value="1"/> |
|-----------------|---------------------------------|-------------------------------------|----------------------------------|-----------------------------|--------------------------------|

Generate: ☐ Hit List ☒ Hit Count ☐ Side by Side ☐ Image

Search History

DATE: Wednesday, April 12, 2006 [Printable Copy](#) [Create Case](#)

| <u>Set</u> <u>Name</u> side by side | <u>Query</u> | <u>Hit</u> <u>Count</u> | <u>Set</u> <u>Name</u> result set |
|--|---|----------------------------|---|
| <i>DB=USPT; PLUR=YES; OP=ADJ</i> | | | |
| <u>L25</u> | L24 and covalent bond | 10 | <u>L25</u> |
| <u>L24</u> | L23 and hydrophilic and polysulfone and support | 106 | <u>L24</u> |
| <u>L23</u> | 210/500.41.ccls. | 375 | <u>L23</u> |
| <u>L22</u> | L20 and covalent bond | 13 | <u>L22</u> |
| <u>L21</u> | L20 and covalent bond | 13 | <u>L21</u> |
| <u>L20</u> | membrane and hydrophilic and hydrophobic and substrate and middle layer | 92 | <u>L20</u> |
| <u>L19</u> | L8 and adhesive layer | 11 | <u>L19</u> |
| <u>L18</u> | L13 and covalent | 3 | <u>L18</u> |
| <u>L17</u> | 13 and covalent | 39885 | <u>L17</u> |
| <u>L16</u> | L13 and defect free | 0 | <u>L16</u> |
| <u>L15</u> | L13 and covalent bond | 0 | <u>L15</u> |
| <u>L14</u> | L13 and covalent same bond | 0 | <u>L14</u> |
| <u>L13</u> | membrane and middle layer and support and adhesive layer | 42 | <u>L13</u> |
| <u>L12</u> | L11 and bond and covalent same support | 17 | <u>L12</u> |

| | | | |
|------------|--|------|------------|
| <u>L11</u> | middle layer and membrane and support | 584 | <u>L11</u> |
| <u>L10</u> | membrane and middle layer and support and to layer | 0 | <u>L10</u> |
| <u>L9</u> | L8 and layers same covalent bond | 10 | <u>L9</u> |
| <u>L8</u> | 210/490.ccls. | 819 | <u>L8</u> |
| <u>L7</u> | 14 and covalent bond? | 9 | <u>L7</u> |
| <u>L6</u> | 4 and covalent bond? | 8719 | <u>L6</u> |
| <u>L5</u> | L4 and intermedia layer | 0 | <u>L5</u> |
| <u>L4</u> | L3 and polymer and hydrophilic | 9 | <u>L4</u> |
| <u>L3</u> | supported membrane and layers and covalent bond? | 16 | <u>L3</u> |
| <u>L2</u> | L1 and covalent bond | 0 | <u>L2</u> |
| <u>L1</u> | membrane and support and intermedia layer | 1 | <u>L1</u> |

END OF SEARCH HISTORY

Hit List

First Hit

Search Results - Record(s) 1 through 10 of 10 returned.

☐ 1. Document ID: US 6860393 B2

L25: Entry 1 of 10

File: USPT

Mar 1, 2005

US-PAT-NO: 6860393

DOCUMENT-IDENTIFIER: US 6860393 B2

TITLE: Filter device and filter element comprising at least one negatively charged membrane

DATE-ISSUED: March 1, 2005

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|-------------------|-----------|-------|----------|---------|
| Hou; Chung-Jen | Pensacola | FL | | |
| Konstantin; Peter | Boulder | CO | | |
| Yang; Yujing | Newton | MA | | |

US-CL-CURRENT: 210/435; 210/483, 210/490, 210/493.1, 210/497.01, 210/497.1,
210/500.35, 210/500.38, 210/500.41, 210/512.1, 264/41, 427/244

| | | | | | | | | | | | | |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|--------|
| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | K00C | Draw D |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|--------|

☐ 2. Document ID: US 6783937 B1

L25: Entry 2 of 10

File: USPT

Aug 31, 2004

US-PAT-NO: 6783937

DOCUMENT-IDENTIFIER: US 6783937 B1

TITLE: Negatively charged membrane

DATE-ISSUED: August 31, 2004

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|-------------------|-----------|-------|----------|---------|
| Hou; Chung-Jen | Pensacola | FL | | |
| Konstantin; Peter | Heinade | | | DE |
| Yang; Yujing | Pensacola | FL | | |

US-CL-CURRENT: 435/6; 210/483, 210/490, 210/500.35, 210/500.38, 210/500.41, 264/41,
427/244, 435/180, 435/4, 436/86, 436/94

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw D. |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|---------|
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|---------|

☐ 3. Document ID: US 5683916 A

L25: Entry 3 of 10

File: USPT

Nov 4, 1997

US-PAT-NO: 5683916

DOCUMENT-IDENTIFIER: US 5683916 A

**** See image for Certificate of Correction ****

TITLE: Membrane affinity apparatus and purification methods related thereto

DATE-ISSUED: November 4, 1997

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|---------------------|-------------|-------|----------|---------|
| Goffe; Randal A. | Medway | MA | | |
| Zale; Stephen E. | Marlborough | MA | | |
| O'Connor; James L. | Chelmsford | MA | | |
| Kessler; Stephen B. | Princeton | MA | | |

US-CL-CURRENT: 436/535, 210/198.3, 210/500.21, 210/500.23, 210/500.41, 210/638,
210/656, 435/180, 435/181, 435/182, 435/287.1, 435/287.2, 435/288.1, 435/6,
436/161, 436/178, 436/518, 436/531, 436/532, 530/413, 530/417

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw D. |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|---------|
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|---------|

☐ 4. Document ID: US 5543054 A

L25: Entry 4 of 10

File: USPT

Aug 6, 1996

US-PAT-NO: 5543054

DOCUMENT-IDENTIFIER: US 5543054 A

TITLE: Method and apparatus for covalent immobilization of charge- conjugated carbohydrate molecules

DATE-ISSUED: August 6, 1996

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|-------------------|-----------|-------|----------|---------|
| Charkoudian; John | Carlisle | MA | | |
| Pluskal; Malcolm | Acton | MA | | |
| Wang; David | Lexington | MA | | |
| Phoebe; Charles | Uxbridge | MA | | |

US-CL-CURRENT: 210/638, 204/462, 210/500.36, 210/500.37, 210/500.41, 210/502.1,
210/506, 436/172, 436/178, 436/94

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KMIC | Draw D |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|--------|
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|--------|

☐ 5. Document ID: US 5389449 A

L25: Entry 5 of 10

File: USPT

Feb 14, 1995

US-PAT-NO: 5389449

DOCUMENT-IDENTIFIER: US 5389449 A

TITLE: Sulfonamide bonded hydrophilic coatings

DATE-ISSUED: February 14, 1995

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|--------------------|---------------|-------|----------|---------|
| Afeyan; Noubar B. | Brookline | MA | | |
| Hodjat; Hossein K. | Jamaica Plain | MA | | |
| Varady; Laszlo | Malden | MA | | |

US-CL-CURRENT: 428/523; 210/198.2, 210/500.34, 210/500.38, 210/500.41, 210/502.1,
210/635, 210/656, 428/403, 428/407, 428/521, 502/402, 521/31, 521/32, 521/33

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KMIC | Draw D |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|--------|
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|--------|

☐ 6. Document ID: US 5024765 A

L25: Entry 6 of 10

File: USPT

Jun 18, 1991

US-PAT-NO: 5024765

DOCUMENT-IDENTIFIER: US 5024765 A

TITLE: Composite membranes and processes using them

DATE-ISSUED: June 18, 1991

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|------------------|---------------|-------|----------|---------|
| Linder; Charles | Rehovot | | | IL |
| Perry; Mordechai | Petach Tikva | | | IL |
| Nemas; Mara | Neve Monosson | | | IL |
| Katraro; Reuven | Rishon Lezion | | | IL |

US-CL-CURRENT: 210/651; 210/490, 210/500.41, 210/654

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KMIC | Draw D |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|--------|
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|--------|

☐ 7. Document ID: US 4839203 A

L25: Entry 7 of 10

File: USPT

Jun 13, 1989

US-PAT-NO: 4839203

DOCUMENT-IDENTIFIER: US 4839203 A

**** See image for Certificate of Correction ****

TITLE: Semi-permeable membranes prepared via reaction of cationic groups with nucleophilic groups

DATE-ISSUED: June 13, 1989

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|----------------------|-----------|-------|----------|---------|
| Davis; Thomas E. | Lafayette | CA | | |
| Schmidt; Donald L. | Midland | MI | | |
| Kau; Jee I. | Concord | CA | | |
| Wessling; Ritchie A. | Midland | MI | | |
| Whipple; Sharon S. | Sanford | MI | | |
| Fibiger; Richard F. | Midland | MI | | |
| Pickelman; Dale M. | Auburn | MI | | |

US-CL-CURRENT: 427/244; 210/500.27, 210/500.41, 427/393.5, 427/399, 427/412.1, 96/13

| | | | | | | | | | | | | |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|--------|
| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KMIC | Draw D |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|--------|

☐ 8. Document ID: US 4720345 A

L25: Entry 8 of 10

File: USPT

Jan 19, 1988

US-PAT-NO: 4720345

DOCUMENT-IDENTIFIER: US 4720345 A

TITLE: Semipermeable membranes of modified styrene-based polymers, process for their manufacture and their use

DATE-ISSUED: January 19, 1988

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|------------------|---------------|-------|----------|---------|
| Linder; Charles | Rehovot | | | IL |
| Aviv; Gershon | Tel Aviv | | | IL |
| Perry; Mordechai | Petach Tikvah | | | IL |
| Kotraro; Reuven | Rehovot | | | IL |

US-CL-CURRENT: 210/650; 210/500.29, 210/500.34, 210/500.37, 210/500.38, 210/500.41, 210/500.42, 210/654

| | | | | | | | | | | | | |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|--------|
| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KMIC | Draw D |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|--------|

☐ 9. Document ID: US 4690766 A

L25: Entry 9 of 10

File: USPT

Sep 1, 1987

US-PAT-NO: 4690766

DOCUMENT-IDENTIFIER: US 4690766 A

TITLE: Chemically modified semipermeable polysulfone membranes and their use in reverse osmosis and ultrafiltration

DATE-ISSUED: September 1, 1987

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|------------------|---------------|-------|----------|---------|
| Linder; Charles | Rehovot | | | IL |
| Aviv; Gershon | Tel Aviv | | | IL |
| Perry; Mordechai | Petach Tikvah | | | IL |
| Kotraro; Reuven | Rehovot | | | IL |

US-CL-CURRENT: 210/654; 210/500.28, 210/500.29, 210/500.33, 210/500.37, 210/500.38, 210/500.39, 210/500.41, 210/500.42

| | | | | | | | | | | | | |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|---------|
| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw. D |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|---------|

☐ 10. Document ID: US 4690765 A

L25: Entry 10 of 10

File: USPT

Sep 1, 1987

US-PAT-NO: 4690765

DOCUMENT-IDENTIFIER: US 4690765 A

**** See image for Certificate of Correction ****

TITLE: Chemically modified semipermeable membranes and their use in reverse osmosis and ultrafiltration

DATE-ISSUED: September 1, 1987

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|------------------|---------------|-------|----------|---------|
| Linder; Charles | Rehovot | | | IL |
| Aviv; Gershon | Tel Aviv | | | IL |
| Perry; Mordechai | Petach Tikvah | | | IL |
| Kotraro; Reuven | Rehovot | | | IL |

US-CL-CURRENT: 210/654; 210/500.28, 210/500.29, 210/500.33, 210/500.37, 210/500.38, 210/500.39, 210/500.41, 210/500.42

| | | | | | | | | | | | | |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|---------|
| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw. D |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|---------|

Clear

Generate Collection

Print

Fwd Refs

Bkwd Refs

Generate OACS

| Terms | Documents |
|-----------------------|-----------|
| L24 and covalent bond | 10 |

Display Format:

[Previous Page](#)

[Next Page](#)

[Go to Doc#](#)

wherein R.sub.1, R.sub.2 and R.sub.3 have the meanings indicated in claim 1.

18. A membrane according to claim 1, wherein said modified polysulfone is supported as thin film by a porous support.

[Previous Doc](#)

[Next Doc](#)

[Go to Doc#](#)